



**UNITED STATES DEPARTMENT OF COMMERCE**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/935,865	09/23/97	DAY	R

MM71/0111

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EXAMINER  
CHAN, A

ART UNIT  
2881

PAPER NUMBER

DATE MAILED: 01/11/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/935,865

Applicant(s)  
Robert C.L. Day et al

Examiner  
Allan Chan

Group Art Unit  
2861



☐ Responsive to communication(s) filed on \_\_\_\_\_.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-39 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-12, 15, 21, 22, 28, 29, 31-35, and 37-39 is/are rejected.

☒ Claim(s) 13, 14, 16-20, 23-27, 30, and 36 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 13, 14, 16-20, 23-27, 30, and 36 are objected to under 37 CFR 1.75© as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, and/or, cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12, 15, 21, 22, 28, 29, 31, 35, 37-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

- Claims 1-4, 7-9, 38, and 39 the words “an ink ribbon” or “ink ribbon” are not clear if these are the same ink ribbon as mentioned earlier.

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- Claims 1-11, 13, 22, 28, 31, 38, and 39 the word **“arranged”** is vague and indefinite
- Claim 31, the word **“arrangement”** is vague and indefinite.
- Claim 2, the phrase **“a printed label”**, is unclear if this is the same printed label as mentioned earlier.
- Claims 2 and 37-39, the phrase **“image receiving tape”** is unclear. Is it referring to the **“thermally sensitive image receiving tape”** or the other **“image receiving tape”**?
- Claim 11, the words **“a and said detecting means”** are not clear whether there are two detecting means the applicant is referring to.
- Claims 15 and 35, the word **“substantially”** is vague and indefinite.
- All remaining claims are rejected because they are dependent on a rejected base claim(s).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

5. Claims 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Gunther et al (5,821,975).

Gunther et al discloses a cassette comprising:

\* a housing in which a reel holding a supply of tape is arranged, said reel being rotatable with respect to said housing and having a plurality of markings thereon, said housing being arranged so that said markings are detectable by a detecting arrangement external to said cassette to provide information relating to the rotation of said reel (Abstract).

\* said tape is ink ribbon (#29, Fig. 1a)

\* said reel supports a supply of unused ink ribbon (#26, Fig. 1a) or a supply of ink ribbon which has been used (#25, Fig. 1a)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 7-10, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (UK 2-194-487 A) in view of Minowa (5,183,333).

Suzuki discloses a thermal printing apparatus comprising:

- \* a thermal print head (#320, Fig.18) for printing an image on said image receiving tape, said print head having a first mode of operation and a second mode of operation (Abstract)
- \* receiving means (combination of platen roller 322 and frame 315 having engaging notches 316; fig.18) for receiving in the first mode of operation a supply of image receiving tape and a supply of ink ribbon (#311, Fig. 18) for providing an image on said image receiving tape, and in the second mode of operation a supply of thermally sensitive image receiving tape (heat sensitive paper discussed at p.6, ll 113)
- \* driving means for driving said ink ribbon (page 5, ll 58-64)
- \* control means (page 8, ll 44) for controlling said thermal print head
- \* detecting means (page 8, ll 42) for detecting if an ink ribbon is present or absent in said receiving means and for providing a signal (page 8, claim 2) to said control means indicative

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of the presence or absence of the ink ribbon, said control means being arranged to control said thermal print head to operate in said first mode of operation when an ink ribbon is present and said second mode of operation when no ink ribbon is present (Abstract) , wherein said detecting means(#319, Fig.18) is arranged to detect, when said driving means is activated (page 5, ll 58-64), a characteristic indicative of movement of said ink ribbon to determine if an ink ribbon is present

\* said detecting means is arranged to determine if ink ribbon is present along a portion of an ink ribbon path (#319, Fig. 18)

\* said detecting means comprises a first emitting element (Page 7, ll 54-58) and a second detecting element (Page 7, ll 58-63), wherein the first emitting element is arranged to emit a signal which interacts with said ink ribbon when present and said detecting element, depending on whether or not ink ribbon is present, either receives or does not receive the signal emitted by the emitting element

\* driving means (page 5, ll 58-64) are provided for driving said ink ribbon and the detecting means (#319, Fig.18) is arranged to detect, when said driving means is activated, a characteristic indicative of movement of said ink ribbon to thereby determine if an ink ribbon is present (Page 5, ll 58-64)

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- \* said ink ribbon is mounted on a rotatable support member (#3, Fig.2)

- \* said housing is provided with an opening (#319, Fig.18) through which said markings are detectable

However, Suzaki does not teach the following:

- \* cutting means for separating a printed label from the supply of image receiving tape

Meanwhile, Minowa teaches the following:

- \* a tape cutter is preferably positioned near tape exit 16 (col. 5, ll 6-7)

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention was made to modify the invention taught by Suzaki to incorporate the teaching of having a cutter means for separating a printed label from the supply of image receiving tape.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzaki in view of Minowa as applied to claims 1, 8, or 9 above, and further in view of Arakawa (4,642,658).

Suzaki in view of Minowa suggest the claimed invention except the detecting means.



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Arakawa discloses a printing apparatus comprising:

- \* a detecting means comprising of a movable member having a first position when an ink ribbon is present (#13, Fig. 4) and a second position when no ink ribbon is present (#13, Fig. 3), and the detecting means is arranged to determine the position of said movable member (#13a, Figs. 3 & 4)

Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention was made to further modify the Suzaki invention by incorporating the teaching of having detecting means in order to determine the presence or absence of an ink ribbon.

9. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gunther et al (5,821,975) in view of Yamada (5,635,973).

Gunther et al teaches the claimed invention except:

- \* a cassette wherein said opening comprises substantially transparent material

Meanwhile, Yamada teaches the following:

- \* a cassette wherein said opening comprises substantially transparent material (col.3, ll 25-34)

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Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention was made to modify the invention taught by Gunther et al to incorporate the teaching of a transparent material to cover an opening for a sensor.

***Allowable Subject Matter***

10. Claims 3-6, 11, 12, 15, 22, 28, 29, and 37-39 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiners should be directed to Allan C. Chan whose telephone number is 703-305-0621.



ACC

12/29/98



N. Le  
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